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Report No. 1

INTEGRATION OF INFORMATION FOR HOSPITAL RATE SETTING

VOLUME 10: INFORMATION AVAILABLE FOR HOSPITAL  
RATE SETTING IN NEW YORK STATE

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INTEGRATION OF INFORMATION FOR HOSPITAL RATE SETTING

VOLUME 10: INFORMATION AVAILABLE FOR HOSPITAL RATE  
SETTING IN NEW YORK STATE

by

Katharine G. Bauer

This report was prepared under a contract between the Social Security Administration, HEW and the Harvard University Center for Community Health and Medical Care. The views and opinions expressed in the report are the contractor's and no endorsement by the Social Security Administration or HEW is intended or should be inferred. The project officer for this contract was William L. Damrosch, a staff member within the Division of Health Insurance Statistics, Office of Research and Statistics.

Under the HEW reorganization announced March 8, 1977 the Division of Health Insurance Studies has been transferred to the Health Care Financing Administration.



## PREFACE

This is one of a series of working papers in a project whose task is to explore the types of information required to permit equitable hospital rate setting, and the obstacles to its access, integration and use.

As part of the effort to identify the general scope of information required to establish hospital rates, analysis was made of the information presently employed in five different states: Arizona, Maryland, Massachusetts, New York and Washington. This report on New York like those on the other states, was based on an examination of the various reporting forms employed and other background materials, together with interviews with officials both in the agency responsible for administering the rate setting program and in the hospital association.

The report attempts to cover the relation of the information collected to the program's particular objectives and rate setting process, the types of data available, and the history of how the reporting system was developed. The characteristics of the reporting system are described and illustrated in charts or exhibits. Problems of validating, managing and using the information are discussed. Finally an appraisal of the strengths and limitations of the information system is made according to criteria developed as part of this project and presented in the proceedings of its 1975 Conference on Uniform Reporting for Hospital Rate Reviews.



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## I. BACKGROUND

Since 1970 prospective rates of per diem payment to hospitals for New York's Medicaid program and for its eight Blue Cross plans have been determined de facto by the State Department of Health. Officially, however, the state Budget Director establishes the Medicaid rates and the Superintendent of Insurance approves the Blue Cross rates. Rate setting authority stems from a 1969 cost control law and Part 86 of the Commissioner of Health's Rules and Regulations, pursuant to Article 28, the Public Health Law. In March 1976, new cost control legislation for Medicaid was enacted that, while retaining the Department's former role, also authorizes the Budget Director to superimpose two types of across-the-board percentage reductions in the hospital rates the Department recommends. The measure also contained provisions designed to reduce the volume of elective surgery for Medicaid patients.

In addition to this major change in the program, changes are also in prospect for the basic financial reporting system that undergirds hospital rate setting in New York. This paper, written during a period of transition, will outline the information used in 1975 to implement the basic rate setting program under Part 86, review recent and proposed revisions in reporting systems, and also indicate some of the new types of information that might come to be used in the evolving system.

New York State's basic public health law, embodied in Article 28, gives the Department of Health the "central comprehensive responsibility for the development and administration of the state's policy with respect to hospitals and related services," and provides it with unusually extensive licensing and certificate of need powers. The 1969 cost control law and subsequent legislation added rate regulation to these powers. The Department's Division of Health Economics administers rate setting programs for hospitals and nursing homes. The equivalent of sixteen professionals and statistical clerks, with a six-member support staff, calculate prospective rates and deal with rate appeals, with rate setting occupying roughly a quarter of their time and appeals the remainder. Hospital

certificate of need determinations are administered through the staff of the Department's Division of Health Facilities; licensing functions are staffed (in part) by the Division of Health Affairs; utilization review for Medicaid is conducted by the Division of Medical Care Services and Evaluation. Some types of decisions are made by the Commissioner of Health, some by the State Hospital Review and Planning Council. Chart 1 shows how these units of the department are organizationally related.

The Department of Health's Part 86 regulations establish the basic method by which rates are determined for both Medicaid and for Blue Cross reimbursement, and the Commissioner approves all rate recommendations.\* Blue Cross plans, however, are given certain latitude within the framework of the regulations to recommend their own rates of payment according to their own principles of reimbursement embodied in their contracts with member hospitals. In consequence, three slightly different variants of the basic rate setting method have been developed since 1970: one for Medicaid reimbursement to hospitals throughout the state; one for payment to their 140 member hospitals by the seven Blue Cross plans in upstate New York; one for payment by the Blue Cross-Blue Shield of Greater New York to its 185 member hospitals in the 17 county downstate area.\*\* On the average, about 55 percent of hospital revenues in New York State are derived from the rates established under these three methods.

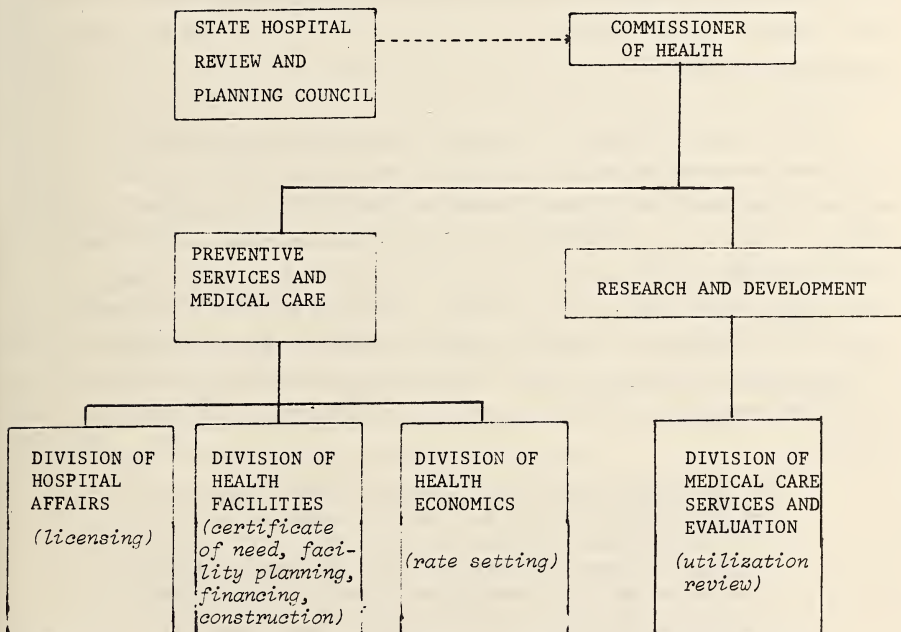
Information for rate calculations under the three programs is largely derived from two legally required annual reports submitted by all hospitals in the state, the Uniform Financial Report (UFR) and the Uniform Statistical Report (USR). The eight Blue Cross plans perform

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\* In the fall of 1975, a ruling by the Attorney General of New York appears to have transferred final decisions on Part 86 regulations from the Commissioner of Health to the State Hospital Review and Planning Council, an appointive body.

\*\* For full descriptions of these programs as of 1974, see Katharine G. Bauer and Arva R. Clark, New York: The Formula Approach to Prospective Reimbursement.<sup>1</sup>

CHART 1: ORGANIZATION OF SELECTED HOSPITAL REGULATORY FUNCTIONS  
WITHIN THE NEW YORK STATE DEPARTMENT OF HEALTH



functions of primary UFR data collection and audit. Blue Cross-Blue Shield of Greater New York then processes all the reports, performs the cost finding for all major third party payors, and furnishes reports required for rate setting to the Department and to the upstate Blue Cross plans.

#### Program Objectives

The 1969 cost control law states that hospital rates shall be established that are "reasonably related to the costs of efficient production of service." While this purpose is similar to the purposes stated in other state rate setting laws, both the operational objectives and the methods of rate setting in New York differ significantly from those of most other rate setting programs. New York does not place major emphasis on strengthening hospital internal management capabilities, or in identifying inefficiencies reflected in out-of-line costs per unit of service, excessive staffing per unit of services, etc.\* Rather, it seeks to:

- keep the rate of inflation of hospital costs directly in line with rates of increase in wages and prices in the general economy;
- discourage expansion of new facilities and new services except where special community needs can be demonstrated;
- encourage the phase-out of excess beds through penalties for underutilized obstetrics, pediatrics, and medical/surgical beds;
- encourage phase-out of underutilized high-technology services, e.g., open-heart surgery, coronary angiography, kidney transplants, ambulatory radiotherapy and renal dialysis; and
- discourage facilities from rendering "unacceptable levels of care."

In the pursuit of these objectives, rate setting in New York State

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\* The Department does, however, monitor compensation for owners of proprietary facilities and to operators and relatives of operators, and exercises controls on interest and depreciation.

uses several control methods. Instead of individual budget reviews, a formula is employed to project each hospital's prospective per diem rate forward on the basis of its audited costs in the fiscal year two years previous. The projection is made according to a trend factor designed to anticipate the rate of inflation to the mid-point of the rate year. As a further control, each hospital's rate of allowed increase is limited by a ceiling calculated as 110 percent of the average routine care costs of the hospitals in its particular reference hospital group. Any additions to the hospital's rate to include new depreciation, interest and operating costs that are associated with new or expanded services require specific planning approval; the amounts of such rate increases are determined by the Department of Health on the basis of rate appeals.\*

Phaseouts of excess capacity are encouraged by reimbursement rates set at imputed utilization minimums of 60 percent for Maternity, 70 percent for Pediatrics and 80 percent for Medical/Surgical services. To encourage the phase-out of certain commonly underutilized high technology services, they too are subject to imputed minimums. For example, Part 86 regulations state that for reimbursement purposes:

Patient days for any facility engaged in open-heart surgery and carrying out less than 100 such operations during the reporting period shall be increased by an amount equal to the average lengths of stay for open-heart surgery cases multiplied by the difference between 100 and the actual open heart surgery operations carried out by the facility. . .

Similar methods are used for coronary angiography and other cardiac invasive procedures (200 procedures minimum) and kidney transplants (25 minimum).

The intention to adjust reimbursement for facilities with "unacceptable levels of care" was newly introduced in 1975 in response to well-publicized shocking conditions in New York nursing homes. A Moreland Commission investigation discovered that facilities that the State Department of Health inspectors and the Division of Health Affairs

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\* In New York State, depreciation must be funded.

knew to be deficient were in no way being penalized through the Medicaid rates set for them by the Division of Health Economics. Furthermore, in arriving at group averages for establishing rate ceilings, substandard hospitals were being grouped with hospitals that complied with state and federal regulations. Thus, the low costs associated with poor quality were being fed into the equations that produced imputed cost norms for "the efficient production of services." Amendments to Part 86 in 1975 penalize such hospitals through the rate setting mechanism until deficiencies are corrected.

In brief, the New York reimbursement method requires not only financial data from hospitals, but also data with which to project economic trends, to assign hospitals to appropriate reference groups, to monitor utilization, and to project the cost impact of new and expanded hospital services. It also depends on reports from both the planning and licensing arms of the Department. With the new provisions for limiting elective surgery for Medicaid patients, and if New York attempts to reduce its average length of patient stay (currently the highest in the nation), rate setters will also require case diagnostic and procedure profiles of each hospital in order to anticipate likely changes in volume. Such profiles would also appear to be essential for the equitable settlement of New York's unusually heavy volume of rate appeals and litigation, occasioned by its formula approach to rate setting and its procedures for adjustments for facility and program expansions.

#### Statutory Authority to Obtain the Data Needed

Article 28 gives the Department of Health broad authority to collect from hospitals the various types of data it needs to carry out its mandated functions. In 1973, a public disclosure law (Section 2805a of Article 28 as amended) spelled out certain reporting requirements in detail. It states that the hospitals' certified financial report be filed annually with the department 120 days after the close of its fiscal year, and:



. . .be in such form as shall disclose all financial transactions as the Commissioner of Health may determine necessary to disclose accurately and specifically the financial condition of each hospital and its expenditures for the preceding year including, but not limited to:

- a. its operations and accomplishments;
- b. including, but not limited to, salaries and other benefits, personnel expenses, operating expenses, equipment and supplies, and all other direct and indirect disbursements allocated to each department and clinical service;
- c. assets and liabilities. . .including the status of reserves, depreciation, special or other funds. . .
- d. loans and investments, interest, rent from investments;
- e. the location of any real property owned by the hospital.

The reports are public records. Further, the Commissioner is given the authority to examine the books and records of the hospital, subpoena witnesses and documents, and make other investigations as are necessary.

The department's rate setting regulations establish penalties on hospitals for the late filing of required reports, for "willful incorrect completion," and for failure to submit to it corrections of inaccurate or incorrect information or data intended for use in establishing rates. A revision of Part 86 in 1975 requires that hospitals notify the Division of Health Economics when they discontinue a service, and the projected cost impact of this discontinuance.

## II. THE BASIC REPORT FORMS

This section of the paper describes the two reports from which the New York rate setting programs derive a large part of the data they require: the Uniform Financial Report (UFR) and the Uniform Statistical Report (USR). Neither of these were specifically designed for rate setting purposes. They have been evolving incrementally over a 16 year period to meet the changing needs of several types of users.

## The Uniform Financial Report (UFR)

The first version of the UFR was developed for use by hospitals in the New York City metropolitan area. It was designed in the late 1950's by a committee representing the United Hospital Fund, the Associated Hospital Service (now the Blue Cross-Blue Shield of Greater New York), and the Greater New York Hospital Association. The purpose of this combined financial statement and detailed cost report package was to provide a basis for hospital reimbursement, for distribution of hospital charitable dollars, and for hospital planning. All hospitals in the area began submitting UFR's to Blue Cross in 1960 to implement its then new cost based payment system.

In 1966, after suitable revisions, the UFR was accepted by the Social Security Administration in lieu of the Medicare Cost Report as the basis for Medicare cost allocations in downstate New York State. Statewide reporting on the UFR began in 1968 when it became the basis for Medicaid cost reporting.

The UFR was developed in conformance with the AHA chart of accounts, and employs its five-digit coding system. However, since the AHA chart was designed solely to provide the managers of hospitals with internal accounting controls, rather than to serve the needs of external reviewers, the UFR has serious limitations as an instrument for cost analysis. Its original designers did not address the problem of reclassifying costs from the responsibility centers that each hospital defines slightly differently to suit its own control needs; no standardized functional cost centers are included. Besides assigning different types of costs to the UFR's prescribed cost categories, hospitals may define cost items differently. The UFR's 31 pages of forms and schedules are accompanied by only three pages of instructions and definitions. As will be seen, the UFR employs only a few natural expense categories and still uses the statistical measures specified in the 1954 AHA chart. Thus, the UFR requires hospitals to supply data in a uniform format, but since the data itself is inconsistently defined and reported,



it does not permit reviewers to compare hospital costs in any detail. This fact, widely recognized both by external reviewers and hospitals, severely limits the types of uses that can be made of the UFR for purposes of rate setting and rate appeals.

In an attempt to correct this situation, beginning in the early 1970's, committees of hospital accountants and economists representing the Department's Division of Health Economics, hospitals, and Blue Cross plans, began trying to develop an accounting and reporting system that would better serve their mutual purposes. They succeeded in formulating guiding concepts and category definitions, but lacking funds for staffing, were not able to produce a final manual.\* Their work ceased when, in 1974, the legislature amended the Public Health Law to require the State Hospital Review and Planning Council and the Department of Health to develop a uniform reporting and accounting system.

As of this writing, the law has only been partly implemented. As a first step, the state hospital code was amended to require hospitals explicitly to maintain their accounts and records in accordance with the AHA chart of accounts (edition unspecified), and on an accrual basis. Data on the UFR is required to be reported in accordance with policies and instructions in the two AHA manuals: Cost Finding and Rate Setting for Hospitals and Uniform Hospital Definitions; the Blue Cross-Blue Shield of Greater New York's Recommended Bases for Cost Allocation; and the Commissioner of Health's administrative rules and regulations in Part 86. In addition, various requirements were specified on the reporting of government subsidies, investments, fixed assets, discounts, allowances and bad debts.<sup>2</sup>

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\* The matrix system developed by these committees to allow cost analysis along both responsibility accounting and functional accounting dimensions is described in the report, Uniform Financial Reporting in Hospitals: Some Criteria to Guide Development and Proceedings of a 1975 Conference, distributed by the Office of Research and Statistics, Social Security Administration.

After considerable delays, in 1976 the Department of Health obtained a budget allocation of \$100,000 to be spent in contracting for the development of a uniform accounting and reporting manual. The request for proposal, described in the final sections of this paper, states the Department's intention not to disrupt the current UFR reporting system, but recognizes the need to build into it a capability to provide data on a more comparable basis and in greater detail.

Exhibit A lists the contents of the UFR in current use:

Exhibit A: Contents of the 1975 New York Uniform Financial Report

Opinion of Independent Public Accountant

Officers

Exhibit I

Section A. Voluntary and Governmental Hospitals:

Part 1. Balance Sheets

Part 2. Statements of Changes in Fund Balances

Part 3. Statements of Changes in Financial Position

Section B. Proprietary Hospitals:

Part 4. Balance Sheet

Part 5. Reconciliation of Capital and Surplus

Part 6. Statement of Charges in Financial Position

Exhibit II - Statement of Revenues:

Part 1. Total Hospital

Part 2. Patient Service Revenue

Exhibit III - Statement of Expenses:

Part 1. Total Hospital

Part 2. Administrative and General; Employee Health and Welfare;  
Operation and Maintenance of Plant; Depreciation -  
Building and Fixtures

Part 3. Imputed Salaries

## Schedules

1. Reclassification of Expenses
2. Recoveries of Expenses
3. Cost Apportionment - Statistical Basis - Non-Revenue Depts.
4. Cost Apportionment - Statistical Basis - Revenue Depts.
5. Cost Apportionment - Statistical Basis - for Providers Having  
Less than 100 Beds
6. Statistical Data
7. Hospital Personnel
8. Payments to Owners, Relatives, Etc., of Proprietary Hospitals

In addition to this basic UFR report, four supplements supply additional data required to permit conformance to the particular payment principles of the major third party payors and/or to calculate their prospective rates. Schedule A is for Medicaid, Schedule B for Medicare, Schedule C for the upstate Blue Cross plans (who have a common contract), and Schedule D for Blue Cross-Blue Shield of Greater New York.

## The Uniform Statistical Report (USR)

The Uniform Statistical Report, like its companion Uniform Financial Report, was developed in New York City in the late 1950's by a consortium of potential users. Agencies concerned with hospital planning took the lead role. Hospitals welcomed the uniform report, since it cut down their work in preparing required reports to different agencies. Hospitals in the downstate area began submitting USR's to Blue Cross in 1960. Blue Cross began using data from these reports to construct hospital groupings for reimbursement purposes under its cost based reimbursement system several years before the introduction of prospective rate setting.

A major revision of the Uniform Statistical Report was made in 1975 when the State Department of Health began requiring its use state-wide in lieu of a previously required Annual Report from hospitals that had been duplicating many of the USR items. The consolidated report was developed by a committee, convened by the State Department of Health, representing the original New York City users, state officials, representatives of upstate Blue Cross plans, and upstate regional planning councils. Again, the USR was designed to serve many users with a variety of responsibilities. The State Department of Health uses material from the report to carry out planning, licensing and certificate of need functions for state Hospital Code compliance, and to obtain data for certain elements of the rate setting method application. There are 25 pages of schedules in the revised report. Their content is outlined in Exhibit B in some detail, since the USR is, to the author's knowledge, the most comprehensive multipurpose hospital report yet developed.

EXHIBIT B: LIST OF SCHEDULES IN THE NEW YORK UNIFORM STATISTICAL  
REPORT, 1975 REVISION

PART I. BASIC INFORMATION

Members of governing authority; presiding officer; hospital administrator

Type of organization (state, municipal, etc.)

Voluntary hospital, IRS Form 990 filing

Compensation of officers

Compensation of 5 highest paid employees over \$30,000

List of physicians and professional corporations providing medical medical services and receiving money payments from the hospital which in aggregate are in excess of 10 percent of the direct gross costs of the cost centers as reported in the Uniform Financial Report, for 8 categories (Lab, Diagnostic Radiology, Therapeutic Radiology, etc.,)

Total number physicians with inpatient admitting privileges

Number of physicians who admitted 20 or more inpatients during reporting period

Emergency physician contract service

Medical school affiliation

Training programs: internship; residencies; registered nurses.

## PART II. PATIENT CHARACTERISTICS

Source of payment - inpatient - by patient days, discharges

Source of payment - outpatient - emergency room, clinic and Community Mental Health Center visits

Direct admission from emergency room to medical, surgical, pediatric, maternity, psychiatric, tuberculosis, physical medicine - rehabilitation

Inpatient care statistics by unit in which care is received: admissions, transfers, discharges, patient days; certified bed capacity end of period

Summary statistics by patient age, sex, patient days, deaths

Newborn: age, sex, days, deaths, number of births

Maternity: (excluding abortion) age, sex, days, discharges, deaths

Medical: age, sex, days, discharges, deaths

Surgical: age, sex, days, discharges, deaths

Ambulatory Care Statistics

Ambulance: trips, disposition of patients

Outpatient Department visits by Clinic, type of physician arrangement (physician contract, non-contract), number of patients based on registry of unduplicated patients

Satellite Ambulatory Center operated by or staffed by hospital: types of services, funding, hours, number of patients on annual clinic register, visits by pay classifications, emergency room visits (if any)

Ambulatory Service in main hospital facility: preadmission testing program, number of patients; ambulatory surgical program, hours

Private ambulatory patients

Mental health services

## PART III. CAPITAL PLANT; PATIENT ACCOMODATIONS

Patient Accomodations - by service

Bed complements - by service

Changes in bed complement during year by services, date of change of building, and final beds as of year end

Regular Newborn Bassinets: total, normal, observation, isolation, prematurity, other, and changes in during year

Specialized beds: ICU, CCU, Dialysis, Recovery, Burn unit, other, and changes during year

Real property owned: land and buildings, land only, buildings only; location, description, use

Real property leased

Construction information: current construction, expansion or improvement in plant (separate project description for each)

#### PART IV. GOODS AND SERVICES USED

Laboratory: clinical service volumes previous and current year; number autoanalysers in service, number channels, types; blood service, types and volumes, previous and current years

Drugs: change in mix of drugs used; formulary

Radiology: diagnostic films in previous and current year; therapeutic treatments in previous and current year

Anesthesia: total time (minutes) previous and current year; by major type: local, conduction, general

Number of full-time qualified anesthesiologists and anesthetists

Operating room: number of physicians with surgical privileges; number of operating room minutes previous and current year

Number of surgical procedures: (20 types and all others) previous and current year

Chronic Hemodialysis: number units, persons receiving treatment, terminations, new patients, numbers of shifts per day

Home Dialysis: service data, total treatments in year, number of patients, transfers, deaths

Acute Dialysis: number different persons receiving treatments in year, number treatments

Psychiatric Services: clinic, day care, night care, number visits, number patients

Cervix Cancer: detection program - number of female admissions over 25, number of inpatient Pap Smears, number outpatient Pap Smears



Termination of Pregnancy: number on outpatient basis, number on inpatient basis, number in other ambulatory centers affiliated with hospital

Home Medical Care Program: number of patients, admissions, deaths, discharges, total days of care provided during year

Other Programs: organized drug addiction and alcoholic treatment programs

Selected Special Service Department Statistics: diagnostic and treatment procedures volumes.

The Hospital Association of New York State convened conferences and workshops for hospitals in upstate New York and in New York City at which state health officials explained the purposes of the 1975 revised Uniform Statistical Report, and answered questions on how to fill out the forms. The report itself contains only two and one half pages of instructions, containing definitions of 28 terms, e.g., "patient day", "referred ambulatory", "tests", "visits", etc.

Many of the same types of definitional and reportorial inconsistencies that are associated with the UFR also diminish the usefulness of the USR. Furthermore, there are no systematic audits of the data reported; Blue Cross only conducts spot checks. Although the quality of the data is now suspect, given the new uses to which the reports will be put by the state in certificate of need and licensing and the penalties that may be imposed for false reporting under the 1973 disclosure law, hospitals may begin to exercise more care in filling out the USRs than they have in the past.\*

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\* Hospitals are seeking to limit the disclosure of certain items on the USR reports, such as the names and address of officers, real property holdings and uses, and amounts of compensation of top salaried personnel. These issues are currently before the courts.

### III. TYPES OF DATA AVAILABLE

Having described two major sources of hospital data in New York State, we will now look at these and other sources from the vantage point of rate setters' information needs. We will review the availability of data regarding hospital costs and volumes of service, physician compensation, scope and quality of hospital services, utilization and case-mix. Finally, we will describe the types of information used in forecasting changes in wages and prices, and in reaching decisions on rate adjustments for facility and service expansions.

#### Financial Data

The Uniform Financial Report supplies all the cost and volume data used by the various programs to calculate the hospitals' basic prospective rates before adjustments.

The accounts in the UFR separate revenue and costs in patient service centers from other sources of operating revenue and expense, and from non-operating revenue, according to the AHA chart classifications.

Revenues are reported separately for inpatients, approved premature nursery, routine nursery, clinic services, emergency service, referred ambulatory service, chronic renal dialysis, ambulatory surgery, home health agency services, ambulance, skilled nursing facility, day care service, health related facility and other, according to 7 types of routine patient care services, 21 ancillary services, and 10 categories of discounts, allowances and bad debts. Bad debts from Medicare, Medicaid, Blue Cross and Other are isolated, net of recoveries.

Expense statements are in two parts. Part 1 first reports the direct expenses of 21 non-revenue departments according to a prescribed sequence for allocating these costs to revenue departments; it then



reports the direct expenses of 45 revenue departments.\* The expenses are categorized simply either as Salaries or Other than Salaries. This highly aggregated display of natural expense categories, considered to be one of the weakest features of the UFR, is somewhat compensated for in Part 2 of the expense statement which calls for reporting of 63 detailed types of expense items, distributed among major expense categories as follows:

- Administration and General - 30
- Employees Health and Welfare - 11
- Union Payments (other fringes) - 4
- Operation and Maintenance of Plant - 12
- Depreciation, Buildings and Fixtures - 6

The items are selected either to monitor certain types of expenditures such as for public relations and legal fees, where changes in allowable cost policy are being considered, or because they are required in the construction of the economic trend indicators, to be described later. The level of specificity can be illustrated by the following examples:

- Accounting and Cashiers
- Telephone
- Malpractice insurance
- Workmens' Compensation insurance
- Uniform Allowance
- Security
- Fuel Oil (3 grades of)
- Water
- Depreciation - Buildings and Fixtures
- Property Rental
- Interest Expense - Capital Debt

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\* The departments are those listed in Exhibit C.

HOSPITAL \_\_\_\_\_

## HOSPITAL PERSONNEL

Schedule 7

WHOLE NUMBERS ONLY (Except Average Number of Employees — One Decimal)

COST CENTERS	COST CENTER CODE	AVERAGE NUMBER OF FULL TIME EQUIVALENT EMPLOYEES FOR PERIOD	STANDARD NUMBER OF HOURS IN THE WORKING WEEK
		2 5 5	2 4 9
<b>NON-REVENUE DEPARTMENTS</b>			
Employee Health and Welfare	03	.	
Operation and Maintenance of Plant	04	.	
Laundry and Linen	05	.	
Housekeeping	06	.	
Dietary	08	.	
Cafeteria	09	.	
Maintenance of Personnel	10	.	
Medical Records	11	.	
Social Service	12	.	
Interns and Residents — Approved Program	13	.	
Supervising Physicians	14	.	
Medical Supplies and Expense	15	.	
Central Services	16	.	
Pharmacy	17	.	
Nursing Administration	18	.	
Intensive Nursing Care	19	.	
School of Nursing	20	.	
General Nursing Service	21	.	
Other (Specify)		.	
Administrative and General	30	.	
<b>REVENUE DEPARTMENTS</b>			
Operating and Recovery Rooms	31	.	
Anesthesia	32	.	
Delivery Rooms	33	.	
Radiology — Diagnostic	34	.	
Radiology — Therapeutic	35	.	
Laboratory	36	.	
Electrocardiograph	37	.	
Electroencephalograph	38	.	
Physical Therapy	39	.	
Occupational Therapy	44	.	
Speech Pathology	54	.	
Audiology	55	.	
Inhalation Therapy	40	.	
Blood Procuring & Drawing	41	.	
Blood Storing, Products & Admin.	49	.	
Shock Therapy	42	.	
Intravenous Therapy	43	.	
Activities Program	45	.	
Cardiopulmonary	46	.	
Cystoscopy	47	.	
Radioisotopes	48	.	
Renal Dialysis	52	.	
Physicians — Non-Approved Program	53	.	
Other (Specify)		.	
<b>AMBULATORY SERVICES</b>			
Ambulance Service	77	.	
Clinics Service	78	.	
Emergency Service	79	.	
Referred Ambulatory Service	80	.	
Home Health Aides' Service	51	.	
Ambulatory Surgery	52	.	
Renal Dialysis	83	.	
Kidney Acquisition	84	.	
<b>OTHER SERVICES</b>			
Skilled Nursing Facility	85	.	
Gift Shop and Public Restaurants	87	.	
Research	88	.	
Appeal for Funds	89	.	
Health Related Facility	90	.	
<b>TOTAL EMPLOYEES</b>	96	.	

\*Numbers of Employees reported must be consistent with salary expense reported in Exhibit III, Part 1 — Statement of Expenses

Together, the non-salary items in Part 2 comprise about 65 percent of hospitals' non-salary costs.

A special Hospital Personnel schedule reproduced as Exhibit C calls for the hospitals to report the average number of full-time equivalent employees according to the specified non-revenue and revenue departments. As can be seen, there is no indication of the mix of skill levels represented, e.g., the time of physicians, R.N.'s, L.P.N.'s, technicians, aides and messengers is aggregated indiscriminately to produce the average number of FTE's for any of the patient care departments. Exhibit C also illustrates the lack of definition of work week of full time equivalents. In stating their "standard number of hours" the hospitals may choose to include or exclude such paid time as holidays, sick leave, etc. This is a particularly soft area in the reporting system.

In 1974, the UFR included a new form on which to report contracted services. Previously, except for Emergency Room services, these had not been separately accounted for.

The statistical bases for non-revenue department cost allocations are as follows:

Depreciation - Building and Fixtures	Square feet
Depreciation - Movable Equipment	Equipment values
Employee Health and Welfare	Gross salaries
Operation and Maintenance of Plant	Square feet
Laundry and Linen	Pounds of Laundry (or pieces of)
Housekeeping	Housekeeping hours
Dietary - Raw Food	Meals served
- Other	Sales value of meals
Cafeteria	Average number of employees
Maintenance of Personnel	Number of employees housed
Medical Records	Percent of time spent
Social Service	Social service time spent
Interns and Resident Approved Programs	Interns and Residents as- signed time
Supervising Physicians	Supervising Physicians time spent
Medical Supplies and Expenses	Costed requisitions
Central Services	Costed requisitions
Pharmacy	Costed requisitions

Nursing Administration  
School of Nursing  
General Nursing Service

General nursing hours of  
service  
School of Nursing assigned  
time  
Supervision of Nurses' time  
spent.

Hospitals may distribute costs to revenue departments according to charges or statistics. Those having less than 100 beds must use a simplified cost finding method.

Workload statistics are, in terms of discharges and patient days, in relation to certified beds for 7 classes of adult inpatient services, approved premature nursery, routine nursery and skilled nursing facility. Visits are the unit of measure for seven classes of outpatient services. No relative value scales are used for special service statistics, which are as follows:

Operating Room	Minutes
Anesthesia	Minutes
Delivery Rooms	Deliveries
Radiology - diagnostic	Films
- therapeutic	Treatments
Laboratory	Examinations
Electrocardiograph	Examinations
Physical Therapy	Treatments
Oxygen Therapy	Minutes
Blood Bank	Transfusions
Ambulance	Calls

In short, despite its lack of a mechanism for reclassifying according to functional cost centers and its other shortcomings previously noted, the Uniform Financial Report contains all the data required for performance of cost finding according to the various principles of reimbursement prescribed by Medicare, Medicaid and Blue Cross, and thus fulfills the principal function for which it was originally designed.

## Physician Remuneration

The Uniform Statistical Report requires that each hospital list the physicians and/or professional corporations that receive payments in the aggregate in excess of 10 percent of the direct gross of certain specified cost centers, i.e., Laboratory; Diagnostic Radiology; Therapeutic Radiology; Anesthesia; Physical Medicine; and Blood Bank. The hospital must report for each such department the numbers of individual physicians involved in providing services and the total amount of hospital approved payments. In addition, the USR reports the terms of any Emergency Room physician's contract services, and statement of hours of coverage.

The Blue Cross-Blue Shield plan of Greater New York, at the request of the Social Security Administration, has, since 1971, been conducting annual surveys of hospital based physicians that yield more detailed information about physician remuneration in the New York metropolitan area. In the 1971 survey, the type of compensation arrangement for each individual was called for in greater detail, e.g., full time salary plus fringes and/or supplementation; part-time salary, plus fringes and/or supplementation; fee-for-service; fee-per-session; percentage of gross charges or net collections. The amount of salary, annuity payments and other deferred income had to be specified, as well as the fringe benefits and any other type of remuneration. The hospital was required to show the cost center line numbers and amounts where these various types of payment had been included in Exhibit C of the hospital's Uniform Financial Report. In addition, the type of activity for which the physician was being paid had to be specified according to the percentage of his efforts devoted to: care of patients; administration of department; undergraduate medical education; intern and residence education; research and other. The hospital was asked to specify how it had arrived at the allocation of time. Finally, the hospital was asked whether the physician had authorized it to bill on his behalf, whether he had agreed to the combined billing method, or whether an

SSA billing form was used. Lastly, the hospital was asked whether the physician turned over to the provider amounts collected by him in accordance with the terms of his appointment.

Subsequent surveys have concentrated on particular types of hospital based physicians: ancillary physicians in one year, chiefs of service in another, etc.

These types of information are not used directly in rate setting, but may be called upon in the examination of evidence for rate appeals.

#### Scope of Services - Hospital Characteristics

Considerable information on the range and scope of services offered by individual hospitals is reported on the Uniform Statistical Report, together with volumes of utilization. Besides data on the major types of inpatient and outpatient services, the hospital is asked to supply detail on special programs such as home care, kidney dialysis, and alcoholism. This information is primarily used for planning purposes, but some of it is also employed as the basis for rate adjustments in line with the utilization minimums prescribed in Part 86. Exhibit D shows the type and level of detail to be reported by each hospital for special procedures.

The three programs employ slightly different types of information to assign hospitals to groups for purposes of calculating ceilings on their rate increases. Most of this information is obtained from the Uniform Statistical Report.

The Division of Health Economics and the upstate Blue Cross plans take the following types of data from the USR's to make their grouping assignments:

- Hospital sponsorship - voluntary, public or proprietary
- Hospital type - teaching, non-teaching; general or special
- Hospital size - i.e., certified beds in service (Blue Cross);  
volume of patient days (Medicaid)



## EXHIBIT D: SPECIAL DIAGNOSTIC AND TREATMENT PROCEDURES

## UNIFORM STATISTICAL REPORT 1975

	TOTAL COLS. 2 through 9	INPATIENTS (2)	ROUTINE & PREMATURE NURSERY (3)	REFERRED AMBULATORY (4)	AMBULATORY PATIENTS			
					OUTPATIENT DEPARTMENT (5)	EMERGENCY ROOM * (6)	AMBULATORY CARE UNIT 1 <sup>b</sup> (7)	AMBULATORY CARE UNIT 11 <sup>b</sup> (8)
01	11	2 5 0	2 5 2	2 5 4	2 5 6	2 5 7	2 5 8	2 5 9
A Laboratory Procedures <sup>c</sup>								
B Electrocardiography Examinations	01							
C Electroencephalography Examinations	02							
D Diagnostic Radiology	03							
1. Number of films	04							
2. Number of Procedures	05							
3. Diagnostic Isotope	06							
E. Radiation Therapy Treatments Total (07=08+09+10)	07							
1. Superficial	08							
2. Orthovoltage	09							
3. Radiotherapy (incl. Gamma)	10							
F. Physical Medicine Treatments	11							
G. Persons Undergoing Surgery Total (15=16+17+18)	15							
1. Performed in OR (E including open heart)	16							
2. Performed elsewhere	17							
3. Open Heart Surgery number of persons (18-30+31)	18							
a. with pump	30							
b. no pump	31							
H. Cystoscopy Room Procedures	19							
I. Blood Bank Transfusions	20							
J. Delivery Room Deliveries	21							
K. Burn Center - Number of patients	22							
L. Cardiac Catheterization Procedures	23							
M. Arthro Cardiology Procedures	24							
N. Cerebral Angiography Procedures	25							
O. Cerebroangiography Procedures	26							
P. Tissue Typing - Number	27							
Q. 1. Organ Harvest - Eye	28							
2. Organ Harvest - Kidney	29							
3. Organ Harvest - Other	32							
*Emergency Room of hospital.								
<sup>b</sup> Present data separately for each satellite Ambulatory Care Unit operated by hospital.								
<sup>c</sup> Specimen processed through multi-channel analyzers to be counted as one procedure.								

PRO 11

- Number of AMA approved resident physicians

The New York City Blue Cross grouping system considers a wider range of factors: it differentiates between JCAH accredited and non-accredited hospitals and between those that have licensed outpatient and emergency services and those that do not, deriving the required information from JCAH listings and from the USR. Its grouping system recognizes six levels of teaching programs, based on USR information.

Hospitals with programs approved by the AMA submit an unduplicated count of residents on their payroll (see the schedule here reproduced as Exhibit E). Data to indicate different types of nursing education programs are also reported on the USR and are used in the New York City Blue Cross grouping.

Changes in bed complement by type of service from year to year are reported on the USR's, as are changes in numbers of laboratory, x-ray and other diagnostic and treatment procedures.

### Measures of Quality

There are no direct means by which differences in the quality of care given in hospitals are reflected in New York's rate setting formula. However, the hospital grouping systems employed in formula applications indirectly take account of the historically higher rates of teaching hospitals that are generally assumed to be associated with better patient care, more complex casemix and more high-technology services. As we have seen, hospitals report on their residency programs in great detail. However, there are no reports on the board certification status of attending physicians.

The rate setting method provides a few sanctions to put a minimum floor on quality and collects information accordingly. Application of utilization minimums to high-technology procedures is the prime example. Also, as noted already, hospitals that are found to have serious Hospital Code deficiencies are subject to various forms of reimbursement



EXHIBIT E: TYPES OF APPROVED RESIDENCY TRAINING PROGRAMS, USR 1975

SPECIALTY	LENGTH OF PROGRAM	NUMBER OF RESIDENCIES OFFERED 1/	NUMBER WHO COMPLETED APPROVED RESIDENCY TRAINING PROGRAM LAST YEAR	NUMBER OF MEDICAL SCHOOL GRADUATES CURRENTLY RECEIVING APPROVED RESIDENCY TRAINING		NUMBER RECEIVING TRAINING UNDER AN AFFILIATED PROGRAM*
				American Graduates **	Foreign Graduates	
	(1)	(2)	(3)	(4)	(5)	(6)
	2 7 0	2 7 1	2 7 2	2 6 9	2 7 3	2 7 4
Anesthesiology	01					
Colon and Rectal Surgery	02					
Dermatology	03					
Family Practice	04					
Internal Medicine	05					
Neurological Surgery	06					
Neurology	07					
Obstetrics and Gynecology	08					
Ophthalmology	09					
Orthopedic Surgery	10					
Otolaryngology	11					
Pathology	12					
Pediatrics	13					
Pediatric Allergy	14					
Pediatric Cardiology	15					
Physical Medicine	16					
Plastic Surgery	17					
Psychiatry	18					
Psychiatry - Child	19					
Radiology - Diagnostic	20					
Radiology - Therapeutic	21					
Surgery	22					
Thoracic Surgery	23					
Urology	24					
Other (specify)						
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
Total Residencies Offered	33					
Total Completed Program - Prior Year	34					
Total Receiving Training	35					

1/ Excludes first year post graduate traineeship (PGT's); include only those residencies for which your institution has received approval.

\*An affiliated program is one for which another institution has received approval.

\*\*American or Canadian Medical Schools.

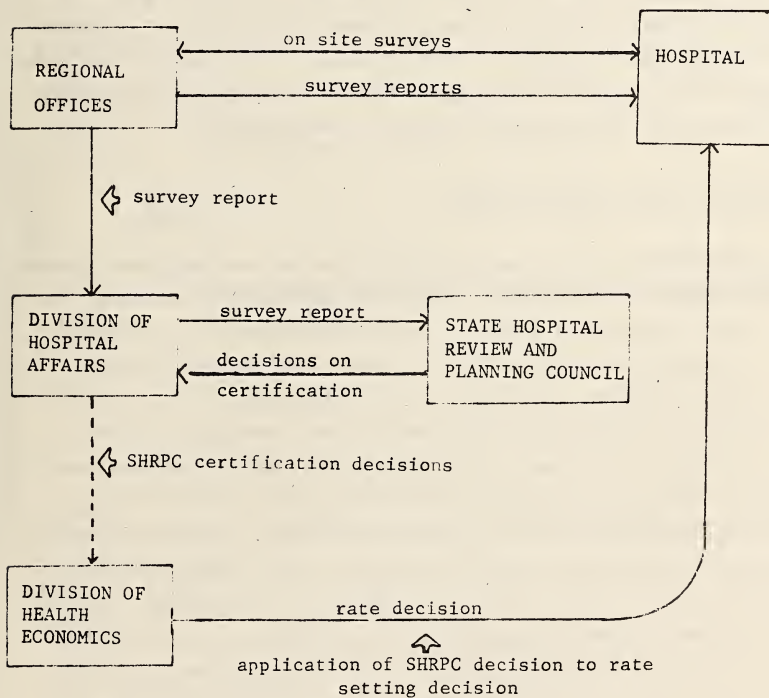
limitation. The Hospital Code, under Article 28, sets forth extremely detailed specifications to regulate the safety of physical plant and equipment, and requirements relating to hospitals' governance, medical staff organization, nature of professional staff, and various aspects of the provisions of services. Compliance with these standards constitutes the condition for granting and biannually renewing each hospital's operating certificate. Recommendations for certification or decertification by the State Hospital Review and Planning Council and SSA, are prepared by the Division of Hospital Affairs in the Department of Health on the basis of information forwarded from regional offices of the department whose teams are responsible for conducting on-site surveys. The new Part 86 regulations exclude the costs of out-of-line hospitals from the calculations of group averages and deny such institutions the right to enter rate appeals. While this would seem to require a flow of information on hospital deficiencies from the Division of Hospital Affairs (as per Chart 2), the Division of Health Economics received no such information for any hospital in preparation of 1976 rate calculations.\* (Sixty nursing homes were cited, however.)

There are no plans for linking PSRO reports on quality deficiencies to either the state or to the Blue Cross rate setting formulas. However, the USR, as revised in 1975, provides a resource for analysis of mortality in individual hospitals that is unique among the data systems currently available to rate setting bodies. One USR schedule reports data that permit analyses of discharges to deaths in each of 16 types of hospital patient care units, e.g., ICU adult, CCU, Renal Dialysis, etc., and for certain types of patients in these units, e.g., gynecological patients cared for in maternity units. Data on patient

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\* Problems in the structural approach to quality assessment and the bureaucratic and legal obstacles to code enforcement in New York are detailed in the October 1975 report of the New York State Moreland Act Commission, Regulating Nursing Home Care: The Paper Tiger. The types of political impediments to enforcement are documented in a series of New York Times articles in the spring and fall of 1975, and in another Moreland Act volume: Political Influence and Political Accountability: One Foot in the Door, January 1976.

CHART 2: FLOW OF CERTIFICATION INFORMATION WITHIN D.P.H. LEADING TO  
PUTATIVE APPLICATION IN RATE SETTING



age, sex, and length of hospital stay related to total numbers of discharges and deaths is obtained separately for newborn and maternity patients in each hospital and, as seen in Exhibit F, for patients in its medical and surgical services.

Differences in the mortality experience of different hospitals do not now enter into either the Division of Health Economic's grouping or appeals decisions. Presumably they are taken into account in decisions by the Commissioner to decertify certain types of beds of services and, less punitively, in establishing his parameters of utilization minimums for reimbursement under Medicaid and Blue Cross programs.

#### Patient and Casemix Characteristics

As we have already noted, the New York rate setting formula applications generate a large burden of hospital appeals and law suits. In many of these, individual hospitals base their demands for rate adjustments on differences in the burden of illness they believe to exist between them and other hospitals in their formula group. Until recently, no hospital profiles of casemix and patients were available to prove or disprove their use. Since April 1975, however, the Department's Division of Medical Care Service and Evaluation has been collecting uniform discharge abstracts on all Medicaid patients discharged from all participating hospitals in the state through its New York State Hospital Utilization Review System (NYSHUR). The abstract form includes all items on the Standard Uniform Discharge Data Set, but adds others, such as physician's Social Security Number, etc. No Medicaid claim is paid unless a completed patient discharge abstract is attached. The prime emphasis of the system is to identify unusually long lengths of hospital stay for Medicaid patients of comparable age and diagnosis. To do so requires that profiles be created for each hospital to show the number and distribution of their Medicaid patients by age group and by type of

# EXHIBIT F: UTILIZATION AND MORTALITY BY PATIENT AGE - MEDICAL AND

## SURGICAL SERVICES - USR 1975

HOSPITAL NAME \_\_\_\_\_

N.Y.S. OPERATING  
CERTIFICATE NO. \_\_\_\_\_

		MEDICAL SERVICE						SURGICAL SERVICE					
		INPATIENT SERVICES						INPATIENT SERVICES					

Source: New York State Department of Health, Uniform Statistical Report, 1975

primary diagnosis according to sex, and single or multiple diagnosis.\*

The HYSHUR system makes it possible to use any subset of data, such as total hospital practice (regardless of physician), or a physician's practice within one hospital or in each of several hospitals. In addition, "the ways in which hospitals or physicians handle specific diagnoses, age groups, etc., can be compared on a valid basis through compensation for patient mix."<sup>3</sup> So far, however, neither the Division of Health Economics nor hospitals have made use of these capabilities in hospital grouping or in Medicaid rate appeals or litigation.

#### Data for Trend Projection

Given the nature of the New York formula system, which projects hospital rates from a base year two years previous according to an economic trend factor, the selection of components and weights of hospital price indices is crucial. The Division of Health Economics, the upstate Blue Cross plans and the Greater New York Blue Cross plan each employ slightly different hospital price indices, requiring somewhat different

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\* Length of stay norms for each of 71 diagnoses, established accordingly to various combinations of the other variables, are derived from the average experience of all providers statewide. A variety of standard reports are generated. "Decision" reports apply length of stay norms to patient data to identify practice patterns of providers, both hospitals and physicians, as follows:

- Differential performance of hospitals over all diagnoses, procedures and physicians
- Differential performance of hospitals with respect to diagnostic and procedural categories
- Differential performance of individual physicians within hospitals with respect to diagnostic and procedural categories
- Differential performance within each hospital by diagnostic and procedural categories.



types of data. Most of the information employed in the various indices is derived either from the Uniform Financial Report or from external economic indicators. The Division of Health Economics describes the index used for the Medicaid trend factor as follows:<sup>4</sup>

The certification of prospective reimbursement rates by the Commissioner of Health takes into consideration the elements of cost; economic factors in the area in which the hospital service is provided; the rate of increase, or decrease, of the economy in such area and costs of hospitals of comparable size. These factors are measured and expressed as a system of projecting probable rates of increase (or decrease) in hospital costs which will be allowed as reasonably related to the future costs of efficient production of service. Economic indices and forecasts of the general economy are utilized to provide some assurance that the prospectively determined rates are permitted to increase, or decrease, in harmony with the general economy (Public Health Law, Section 2807). . .

The projected rates of increase in hospital costs are determined by the product of weights and price movements. The Hospital Price Index is the sum of the weighted price movements of the six major elements of costs noted below.

The weights used are derived from the data reported from the Uniform Financial Reports. A 'weight' represents the ratio that one element of cost (hereinafter referred to as cost components) bears to all projectable components of cost as reported by comparable hospitals in a single group.

'Price movements' are derived from and based upon selected external economic indices, including among others, the Consumer and Wholesale Price Indices of the Bureau of Labor Statistics or, in the alternative, indices developed by the Department.

'Comparable hospitals' means those hospitals which are grouped for the purpose of prospective rate determinations, to assure that the hospitals within each group are as homogeneous as possible with respect to variables including type of ownership, geographic area, type of hospital, and the volume of patient service provided.\*

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\* Special hospital groups are established for the purpose of calculating the trend factor, i.e., the groups are different from those established to calculate the formula's ceiling applications.

The major elements of cost subject to inflation are total operating expenses less depreciation and long-term interest expense, as follows: I) wages and salaries, II) fringe benefits, III) administration and general, IV) dietary, V) housekeeping and maintenance, and VI) professional services. Special items such as nonrecurring events, e.g., loss from sale of assets, or other items unaffected by economic conditions, are included, but with a zero price movement and are hereinafter referred to as: VII) nonprojectable costs.

Exhibit G shows the various sources of the data used to construct the major components of the Department's Medicaid Hospital Price Index.

EXHIBIT G: COMPONENTS AND SOURCES OF DATA FOR THE MEDICAID  
HOSPITAL PRICE INDEX

<u>Component</u>	<u>Source of Data</u>
I. Wages and Salaries	Public Employment Relations Board N.Y. Dept. of Civil Service N.Y. City Office of Collective Bargaining N.Y. State Dept. of Labor
II. Fringe Benefits	
OASI	Civil Service Salary Schedule/Special Study
Workmen's Compensation	Compensation Insurance Rating Board
Disability Insurance	N.Y. State Insurance Dept.
Unemployment Insurance	N.Y. State Dept. of Labor
Residual	Salary price movements (I. above)
III. Administration and General	
Telephone	N.Y. State Public Service Commission
Postage	Consumer Price Index (C.P.I.)
Insurance:	
Malpractice and Liability	N.Y. State Insurance Dept.
Property	N.Y. City Insurance Services Office
Real Estate Taxes	N.Y. State Dept. of Commerce
Legal and Accounting	N.Y. State Bar Assn.; CPA firms
Electronic Data Processing	Wholesale Price Index (W.P.I.); I.B.M.
Residual	W.P.I.: Office Supplies
IV. Dietary	Wholesale Price Index (upstate N.Y.) Consumer Price Index (N.Y. City SMSA)



ComponentSource of Data

## V. Housekeeping and Maintenance

Operation and Maintenance  
Heat (5 categories)

C.P.I.  
Journal of Commerce; Public Service  
Commission

Laundry and Linen  
Housekeeping

C.P.I.: sheets and laundry flatwork  
W.P.I.: toilet tissue, soap, detergent

## VI. Professional Services

Drugs

Gosselin and Co. American Druggist  
Blue Book

Medical Supplies  
Office Supplies  
Diagnostic Radiology  
Professional Fees  
Ambulance  
Laboratory

Health Dept. Survey  
W.P.I.: office supplies  
Health Dept. Survey  
C.P.I.: physicians' fees  
C.P.I.: private transportation  
Health Dept. Survey (medical supplies);  
Technicon (SMA 12-60);  
C.P.I.: maintenance and repairs  
Red Cross programs (5 N.Y. cities)  
E.R. Squibb and Sons, Inc.  
C.P.I.: electrocardiogram  
Manufacturers of coils and venous  
outlet sets  
Percent change in Medicaid reimbursement rates to home health agencies.

Blood Bank

Radioisotopes

E.C.G. and E.E.G.

Renal Dialysis

Home Care Services

The trend factor for the seven upstate New York Blue Cross plans is similar to the Medicaid Hospital Price Index. The wage and salary components are derived from the service component of the New York State Labor Department's Insured Employment series and the New York State Civil Service survey of R.N. wages. However, unlike Medicaid, salary projections are adjusted individually for each Blue Cross plan area to recognize geographic disparities and rates of change in wage levels. Information is derived from a sample of hospitals in each of the seven plans. Indices for non-salary components are in most respects the same as for the Medicaid Hospital Price Index.

In addition to the economic trend factor, the upstate Blue Cross formula includes a "technology factor" to allow for changes in the cost of hospital service occasioned by changes in the types and/or mix of

non-labor items used in patient care, as distinguished from changes in their prices. Unlike the wage and price trending methods, the technology factor is constructed solely on the basis of data hospitals report on their UFRs. It is calculated for specially constructed groups of hospitals on the basis of actual rate of change over two years in selected professional non-salary items reported in the UFRs of sample hospitals in each group. Costs from 36 designated UFR cost centers, such as operating and recovery rooms, are analyzed to create weighted average costs; adjustments are made to remove the portion of cost increases attributable to price inflation.\*

The Blue Cross-Blue Shield of Greater New York projects an economic trend factor similar in principle to other methods. It has long employed its own proxy measures to project the wage and salary components. Hospitals in New York City objected to the limited number of components of the index employed from 1970-74, and the particular proxies it employed. A new, much more elaborate hospital price index, developed by Michael Gort under a contract funded by Blue Cross, was approved by the Department for a one-year trial in 1975. Weights were assigned to 10 categories of wage and salary items and 40 categories of non-labor items, based on the relative importance of the category for each group of hospitals as reported in their 1973 Uniform Financial Reports. In all, 72 proxies were used; 44 for wages and salaries and 20 for non-wage categories. For wage and salary categories, the proxies referred to classes of labor in the non-New York area economy; proxies for non-salary items reflected the area experience to the extent possible, while taking into account the historical relation between local prices and a general price index for the economy as a whole, i.e., the GNP price deflator of the National Bureau of Economic Research and the American Statistical Association.<sup>5</sup>

The Gort report, describing the proposed index, does not list the sources of data used for the proxy measures. One criterion used

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\* The construction of the upstate Blue Cross Technology Factor is described more fully in the Bauer and Clark report on New York rate setting. See reference 1.

in their selection was the frequency of update; monthly or quarterly reports were used insofar as possible to permit allowable adjustments to be made in a timely fashion. Actual supplier prices are used for electric power, gas and fuel oil. (To illustrate the dangers inherent to economic forecasting, the increase in price of fuel and power from 1974 to 1975 was projected at 7.5 percent. Actual increases for the period sometimes exceeded 50 percent.)

For 1975, hospital price indices based on price changes between 1973 and 1974 were developed for eight specially constructed hospital groups in the downstate area. The grouping system did not take account of differences in the geographic location of the hospitals within the 17 county area. Hospitals objected to this feature, pointing to marked differences in labor supply and input prices among the counties. Unfortunately, no simulations were run using historical data to evaluate the predictive power of the index method.

As we have seen, all three economic trending methods used in New York State employ items from the UFR in determining weights for the trend factor components and subcomponents. Likewise, 36 items from the UFR are used to construct the upstate Blue Cross technology trend factor. Because the lack of uniform accounting and reporting in New York and the paucity of definitions and reporting instructions seriously detracts from the reliability of the UFR data items used for these purposes, the upstate New York Blue Cross plans, with the assistance of the Hospital Association of New York State, recently issued a seven page set of definitions, special instructions and subsidiary schedules to hospitals in their region as designed to improve the consistency with which these particular items are reported. This set was distributed as a supplement to the UFR. Common types of reporting errors were identified such as the combining of legal fees with accounting fees, the combining of natural gas with electricity expense, the reporting of non-taxable annuities, and the combining of malpractice, liability and property insurance premiums (see Exhibit G, p. 32). To illustrate the types of definitions given, the item "Drugs" was defined to include I.V. solutions and

anesthetics as well as prescription and non-prescription type drugs; reporting on the column "Medical Supplies" was defined to include prostheses and artificial anatomy replacement parts. Similar attempts at standardization were made for the reporting of physician fees, fringe benefits, laundry and linen, and so forth.

#### Planning and Certificate of Need Information

As already noted, rate setting in New York is based on historical data plus economic projections. Just as hospitals submit no budgets for the rate year, they submit no long range capital budgets. Thus, the various divisions of the Department that might be concerned lack information about hospitals' future expansion plans until they receive requests for certificate of need and rate adjustments.

Once hospital proposals for new or expanded facilities and/or services have been approved by local planning agencies, they are forwarded to the Department for recommendations on certificate of need. Since changes in services will ultimately result in changes in the hospital's operating costs, the planning and rate setting staff of the Department work closely together in analyzing the need for, and the feasibility and projected costs of, all new hospital projects. Regulations specify different types of decision-making structures for projects of different magnitude. In all cases, however, the operating cost impact of the planning decision, both in the target hospital and in surrounding hospitals, is projected by a cadre of rate setting staff from the Division of Health Facilities. Population based resource analyses, service utilization and construction information data from the Uniform Statistical Reports and cost data from the Uniform Financial Reports are freely shared.

Considerable supplementary data may be requested on an ad hoc basis, both in certificate of need reviews and in hospital appeals for rate increases to accommodate to a certified change in service.

Hospitals complain that because the Department has issued no guidelines for the specific types of justifying data it requires to make its financial feasibility and economic impact studies, they do not know in advance what types of data to assemble.\* This partially accounts for the long delays that are said to characterize the C.O.N. and rate appeal processes.

### Monitoring Reports

None of the three rate setting programs monitor changes in hospital costs during the rate year. However, the State Department of Health monitors the number of patient days in each hospital on a quarterly basis. Changes in the various economic trend factors indicators are also monitored; mid-year adjustments can be made at the Department's discretion. Informally, the progress of labor negotiations with hospitals are watched very closely both by the Blue Cross plans and by the Division of Health Economics.

## IV. CHARACTERISTICS OF THE BASIC REPORTING SYSTEM

This section reviews the ways in which the UFR and the USR reports are managed, the types of checks that are made on their accuracy, and the type of analytic reports that are produced from them.

### Management of the UFR and USR Reports

As noted at the outset, the hospitals submit their UFR and USR reports to their local Blue Cross plans. Two of the upstate plans subject the forms to preliminary review and edit, then transmit them to Blue Cross-

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\* Hospitals also object to the lack of guidelines for other types of rate appeals; claim they cannot predict what kinds of data will be called for to justify their case.



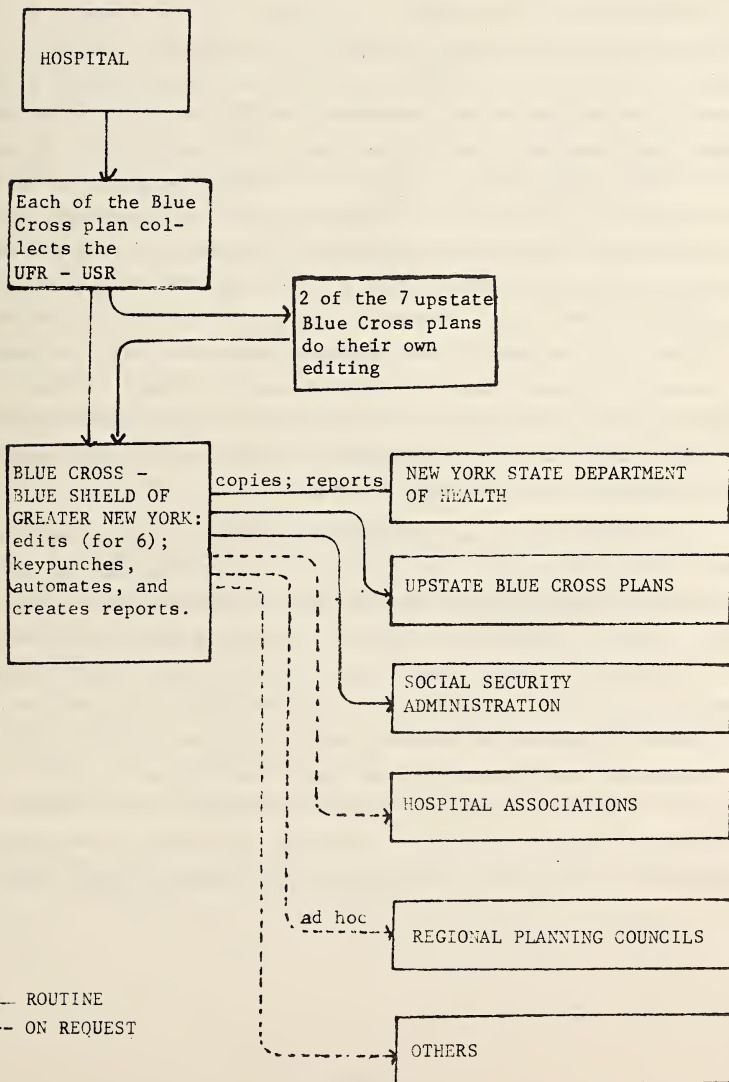
Blue Shield of Greater New York which, as shown in Chart 3, plays the central role in managing the data. The other plans merely forward the forms to Blue Cross-Blue Shield of Greater New York to perform editing as well as data processing functions. The UFR has been precoded for data processing since 1967; the USR was only coded at the time of the 1975 revision. Blue Cross-Blue Shield of Greater New York processes the two reports and provides copies to the Social Security Administration, to the Department of Health, to the upstate Blue Cross plans, and to the Hospital Association of New York State. It also supplies certain computer reports to these agencies, either routinely or upon request. The budget for the entire operation, including auditing and cost finding for all third party payors, is about \$3 million. These costs are prorated according to each third party payor's share of the patient load as reported on the USR.

#### Validation of the Data Reported

There are several types of checks on the accuracy of the data submitted in the Uniform Financial Reports. First, as noted earlier, each report must be accompanied by a statement from an independent public accountant. Second, each of the eight Blue Cross plans conduct field audits of the UFR's in the hospitals in their area on behalf of all major payors. These, too, are paid for on a cost-sharing basis. The Division of Health Economics provides lists of hospitals for which it wants special audits, specifying for each institution the particular areas for special review.

Since the dollar figures on hospital payrolls, vouchers, etc., have already been certified, Blue Cross auditors, as a matter of policy, direct most of their efforts to checking the accuracy of the hospital's statistical and workload measures, focusing on those that have the greatest impact on reimbursement, e.g., patient days, discharges, visits, etc. As with Medicare Cost Reports employed in other states, that parallel the UFR in many respects, there are many problems associated with the

CHART 3: FLOW OF UFR - USR INFORMATION





hospitals' reporting of their statistics. Although their major counts of inpatient care are usually reported completely, there may be many gaps in the reporting of special services, and the figures reported may not be accurate. For example, the number of patient days an individual hospital reports on its UFR often differs from the number it reports on the USR's for the same period. Assignments of visits between emergency room and outpatient departments often do not reflect the actual counts. Hospitals may interpret the terms "visit" and "clinic" in any one of several ways, and may use their own workload measures instead of those prescribed on the UFR. For example, without so indicating, they may enter counts of operations performed in the column calling for number of operating minutes, or enter numbers of X-ray procedures instead of the number of films. Since certain of the special services listed on the UFR are often performed by different departments in different hospitals, e.g., different types of electrodiagnosis, volumes in these departments may not truly represent the "product" of the report category. Blue Cross auditors devote a considerable portion of their time in educational efforts to correct such situations.

No certification by an independent auditor is required for the Uniform Statistical Report. The problems of completeness and reliability of reporting already noted in the UFR are thus presumed to be even greater. They are compounded by the fact that hospitals have no perception of what use, if any, is made of the data they report, and thus have no particular incentive to report it accurately. Blue Cross auditors check the USR's statistics when they conduct field audits of the UFR's, but, in general, concentrate on areas where discrepancies are found between the two reports. Now that the USR has become a public document, the Division of Health Economics is beginning to conduct its own checks on completeness and accuracy, but given other pressures on staff time,

this cannot be a high priority undertaking.\*

### Analysis

Every year Blue Cross-Blue Shield of Greater New York gives each third party payor a computer printout of the cost apportionment stepdown schedules developed from UFR data under its own principles of reimbursement. The four pages of this printout contain all the base year statistical data on which each hospital's prospective rate is eventually calculated, after applying the ceiling limit, trend factor, utilization minimums, etc. The Division of Health Economics does not request, or receive, any other type of routine analysis of the UFR data; its rate setting method does not require it. However, it does refer to the complete UFR and USR documents in handling appeals. Since the detailed data on the UFR are reported so inconsistently and unreliably, as we have already noted, the Department is highly selective in choosing items for making regional comparisons and other types of analyses for use in health policy and cost containment policy decisions. Any such research depends solely on data taken manually from the Department's UFR copies.

The Hospital Association of New York State uses the UFR's to conduct annual reports on the fiscal position of New York's hospitals, creating detailed trend analyses by geographic region. Such reports could, in theory, be programmed for the Blue Cross-Blue Shield of Greater New York computer. But the Hospital Association prefers to do its own analyses. Unfortunately, when the Blue Cross computer system was first developed, the computer programmers failed to ascertain non-Blue

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\* The Uniform Discharge Abstract form employed for the Department's NYSHUR program was subjected to intensive quality control efforts during its introductory year. Error rates of 60 percent were reduced to 15 percent over the course of the first nine months. (Interview with Dr. Roger Herdman; March 19, 1976.)

Cross users' needs for analytic reports.

For its own purposes, Blue Cross has developed programs to generate a series of routine reports, in addition to the basic cost allocation reports, drawing on the eight-year bank of UFRs stored in its computer. These are of several major types: those that produce detailed cost analyses of the individual hospital over time; those that produce comparisons of costs in hospitals within the same group; and intergroup comparisons. Reports yield 14 standard analyses of individual hospital trends. A much larger number of group comparisons are possible, using 45 characteristics of hospitals that are keypunched. Recognizing the weaknesses in the basic data, however, Blue Cross makes sparing use of these analyses. As one Blue Cross official commented: "They are just a bunch of numbers."<sup>6</sup>

Since the Uniform Statistical Report was not coded until 1975, no routine computer analyses have yet been designed or programmed. Given the present quality of hospital reporting on the USRs, and because many new types of items that were called for in their 1975 revision are expected to create new reporting problems for a year or two, there has been no urgency in planning these analyses. Again, the Department of Health uses copies of the USR documents to derive the data it requires for hospital grouping and utilization minimums. However, recognizing the rich resource the USR could provide for planning, a Task Force organized by the Department and the Health Planning Commission is currently exploring types of uses to which it can be put by the new Health Systems Agencies. So far, the state has only requested a few ad hoc computer runs from Blue Cross.

## V. SUMMARY AND CONCLUSIONS

New York State has pioneered in the development of statewide uniform financial, statistical and utilization reports from hospitals. It also provides a unique example of how the functions and costs of data

processing and cost finding to serve the needs of many types of official and voluntary agencies can be centralized in one agency. The various responsibilities contracted out to eight New York Blue Cross plans safeguard the capabilities of the State Department of Health to obtain the processed data through times of fiscal crisis, such as the present, when state government is making drastic personnel cuts. Finally, the sharing of data between the certificate of need review and the rate setting staffs of the Department of Health encourages mutually reinforcing types of implementation of these two types of regulatory functions.

On the other hand, the lack of functional accounting and uniform reporting in New York seriously impairs the usefulness of the large volume of financial and statistical data collected on the UFR and USR forms. Furthermore, the rate setting processes fail to take into account many types of data available within the Department, such as casemix from the New York State Utilization Review system and quality of care deficiencies from the certification process, that might make its grouping system more sophisticated and thus lighten its burden of rate appeals. In general, the unusually wide scope of information available from the USRs and the Department to show differences in service utilization and differences in patient outcomes is not being systematically related to differences in hospital costs for the purposes of rate setting.

Some of the strengths and limitations of the New York information for rate setting are summarized in Exhibit H.

EXHIBIT H: SOME STRENGTHS AND LIMITATIONS OF THE NEW YORK STATE  
INFORMATION SYSTEM

Strengths

- New York's statewide Uniform Financial Report and its Uniform Statistical Report reduce the reporting burden on hospitals; together, they undoubtedly reduce administrative costs of data reporting and collection.
- The single audit and management of the UFR and USR by the eight Blue Cross plans of New York State and the centralized computer processing by the Blue Cross-Blue Shield of Greater New York under cost sharing arrangements also offer efficiencies.
- Automation of the UFRs and the USRs permits the generation of routine reports to serve the particular needs of many types of users.
- The UFR data base, built up since 1968, permits trend analyses of costs in individual hospitals and in groups of hospitals.
- The UFR and USR identify under-utilized services and facilities.

Limitations

- Lack of functional accounting and a manual to specify account definitions and reporting conventions seriously impairs the usefulness of the UFR for making comparative cost analyses. Problems of definitions and reporting instructions also impair the quality of USR data and limit its potential usefulness.
- Hospital associations feel they lack sufficient input into policy making for data management.
- To date, the potential uses of the rich data base have remained largely unexploited. In part, this may reflect the weaknesses of the basic data, in part, the inability of potential users to identify the types of analyses they need. This, in turn, stems from inadequate resources and interagency communication.
- Problems of the quality of the data, and the many changes in the facilities and programs of individual hospitals, impair the validity of historical analyses.
- They fail to identify excess utilization. Reports from NYSHUR that explicate these factors for the Medicaid caseload are not used in setting Medicaid rates.



- FTE hospital personnel are categorized by department in the UFR.
- Most hospital price items used in the construction of the three hospital price indices are included in the UFR.
- There is a prescribed sequence for the allocation of indirect costs.
- All data required for placing each hospital in its reference group is reported in either the UFR or the USR.
- A number of the Department's Hospital Price Index provide trend projections of non-salary items that are agreed to be satisfactory.
- A schedule on the USR that reports costs and timetables for construction in progress helps rate setting bodies anticipate future rate adjustments.
- Data is shared by the Department's Division of Health Facilities and its Division of Health Economics.
- Hospital revenues are not reported and, therefore, cannot be matched with costs.
- All types of hospital personnel are lumped into an aggregate natural expense category for Salaries, without differentiation between professionals and non-professionals. There is no standard definition of an FTE.
- Non-salary items are aggregated into a single natural expense category.
- The statistical bases are, as elsewhere, acknowledged to be unsatisfactory.
- Workload statistics are likewise unsatisfactory. No relative value scales are employed to account for differences in the complexities of different tests and treatments.
- Important types of data to construct equitable groupings, e.g., casemix, specialist mix of physician staff, small area geographic variations in salary and wage levels, etc., are not included.
- No methods satisfactory to all parties have yet been developed for the salaries and wages component.
- Lack of reported long-term capital budgets impedes the ability of both rate setting bodies and planning agencies to anticipate future expansion requests.
- The specific types of data required for such analyses have never been specified, a large proportion is obtained ad hoc from hospitals, leading to delays in decision-making.

- Under new regulations, hospitals that violate the state hospital code are to be penalized through the reimbursement mechanism. Reports from the Department's survey teams are to be communicated to its Division of Health Economics.
- The USRs contain schedules that display patient mortality experienced by hospital and type of hospital service according to patient age that could be used to provide a basis for differential reimbursement to recognize differentials in patient outcomes.
- Required certification of the UFRs followed by routine external audits assure accurate reporting of the dollar figures; Blue Cross auditors pay special attention to improving the accuracy of the statistical measures.
- So far, delays in communication have obstructed the flow of any such reports. No other sources of data to show differences in the quality of care among hospitals are factored into rate setting formulas.
- This data has, up to now, not been analyzed or used. Nor is data from NYSHUR to show differences in Medicaid casemix and case complexity among hospitals used in the Medicaid formula.
- The USR report is not certified. Since many schedules contain sensitive material that is public record under the disclosure law, in the absence of quality controls incentives for fudging data are powerful.

## VI. FUTURE PLANS

Blue Cross plans, the Department of Health and hospital associations in New York State have pioneered in the development of uniform hospital reporting systems, and over the years have been modifying these systems to meet the changing requirements of old and new users. This tradition appears to be continuing.

The Department's 1976 Request for Proposal for the development of a new manual to supplement the AHA chart of accounts in hospital UFR reporting states that the purpose is "to assure the financial comparability of hospitals necessary to the equitable implementation of State policy in the areas of reimbursement and planning." The R.F.P. requires



that the manual set forth standards of accounting that will:<sup>7</sup>

- define precisely the account assignment of items of income and expense;
- identify major departmental cost centers and sub-departmental or supplementary cost centers for which data must be accumulated or reported;
- specify cost allocation methods and procedures;
- insure the accurate accumulation of data needed to satisfy the requirements of all pertinent sections of the Public Health Law - including the public disclosure amendment, and the basic accounting and statistical data needed by Title XVIII fiscal intermediaries and Blue Cross plans;
- identify institutional program areas and management policies and procedures which vary among institutions and which prohibit an effective analysis and comparison of institutional services; develop sub-procedures designed to report and explain fiscal and statistical variance.

In addition to providing a manual, it appears likely that another major revision of both the UFR and the USR will be proposed. The possibility of combining the two into a single consolidated report is being considered. The Department also hopes that the new reporting system will generate information required by the New York State public bonding authority for the marketing of bonds for hospital construction, i.e., that the data reported will address the authority's special amortization and depreciation rules.

Since the new system is yet to be designed, the manner in which it will be developed and introduced is not yet known. As noted earlier, considerable development work has already been done by volunteer committees representing the Department, hospitals and Blue Cross plans. The Request for Proposal requires that the new manual be ready for use by hospitals when they submit data for the calculation of their 1977 fiscal year rates. If this timetable is followed, hospitals will have to follow the manual instructions on the UFRs they transmit to Blue Cross on October 1, 1976. This would appear to allow no time for either pre-testing of any new forms that might be developed or for a program to instruct hospital

accountants in the manual's use.

The construction of the economic trend factors used in the three rate setting formula methods is still very much under debate. As we have noted, the Gort index for New York City received only a one-year conditional approval by the Department; whether it will be used in future rate calculations is not yet known. Gort has proposed a separate H.P.I. for upstate Blue Cross plans, similar to that constructed for the down-state area, but using statewide and national proxies for non-labor items instead of proxies from the New York metropolitan area. This H.P.I. has not been accepted by the upstate hospitals, largely because it failed to use wage and salary data particular to the different geographic areas within the region. Nor has it been approved by the Department.

The Division of Health Economics has been working on a new composite index to construct a trending factor of the Medicaid H.P.I. salary and wage component. Instead of the series of proxies it now uses, set forth in Exhibit G, it would employ an average of the increases achieved through collective bargaining settlements for all industries in the various geographic regions of the state, as a single proxy. Data is available from monthly reports of the New York Department of Labor.

The criteria employed for assigning hospitals to reference groups is also being reexamined, with Blue Cross-Blue Shield of Greater New York taking the lead. The system it hopes to develop will eventually include factors such as casemix and case complexity. The plan conducts an annual utilization survey of hospitals that could supply much of the necessary new data required for such a grouping system. In addition, the Department of Health, under a grant from the National Center for Health Statistics, is working with a consortium of PSRO's, the Hospital Planning Commission, hospital associations and other potential users to develop a hospital care reporting system to cover all patients in the state, paralleling or expanding the current NYSHUR system for Medicaid patients.

The big unpredictable element in New York's situation is the

effect New York's fiscal crisis may have on the current attempts to improve the scope and quality of the information necessary for implementing hospital rate setting in a manner that promotes the cost effectiveness goals of Article 28 and the cost containment goals of the Cost Control law.

FOOTNOTES

1. Harvard Center of Community Health and Medical Care under the Department of Health, Education and Welfare grant # 5-P16-HS00472.
2. Chapter V of Title 10 (Health) of the Official Compilations of Codes, Rules and Regulations of the State of New York, Subchapter C, Part 720, Section 270.23.
3. Norman C. Allaway, John S. Uppal, New York State Hospital Utilization Review Data System: Concepts and Descriptions, New York State Department of Health, July 1975.
4. New York State, Department of Health, Division of Health Economics, Bureau of Economic Analysis, Hospital Price Index: Sources and Methods, January-December 1975.
5. Michael Gort, Report on the Hospital Price Index for Greater New York, prepared for the Associated Hospital Service of New York (now the Blue Cross-Blue Shield of Greater New York), processed, 1975.
6. James Ingram, quoted in Uniform Reporting for Hospital Rate Reviews: Criteria to Guide Development and Proceedings of a 1975 Conference, Katharine G. Bauer, Office of Research and Statistics, Social Security Administration, Department of Health, Education and Welfare, December 1975, p. 36.
7. New York State, Department of Health, and State Hospital Review and Planning Council, Request for Proposal, February 18, 1976.





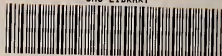


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